UC Merced

UC Merced Previously Published Works

Title

Measurement and desert: Why grades cannot be deserved

Permalink

https://escholarship.org/uc/item/66r891w3

Journal

Thought A Journal of Philosophy, 10(4)

ISSN

2161-2234

Author

Napoletano, Toby

Publication Date

2021-12-01

DOI

10.1002/tht3.506

Copyright Information

This work is made available under the terms of a Creative Commons Attribution License, available at https://creativecommons.org/licenses/by/4.0/

Peer reviewed

Measurement and Desert: Why Grades Cannot be Deserved

Toby Napoletano

2021

1 Introduction

It is typically thought that a student deserves—or at least can deserve—a grade in a class.¹ The students who perform well on assessments, who display a high degree of competence, and who complete all of the required work, deserve a good grade. Students who perform poorly on assessments, who fail to understand the course material, and who fail to complete the required work, deserve a bad grade.

In this paper, I want to raise a challenge to this conventional view about grades. In particular, I want to challenge the idea that grades—understood appropriately—can be objects of desert for class performance. In other words, I argue that they are simply not the kind of thing that can be deserved, given their epistemic function in education. Rather, they serve (in the relevant contexts) as evidence of the desert basis (student performance, broadly conceived) that grounds a student's being deserving of other objects (praise or recognition, or awards, e.g.). In short, grades may measure how deserving one is, but grades themselves are not deserved. The traditional view, I argue, results from a failure to appreciate the evidentiary and explanatory relationships between desert facts, desert bases, and measurements of desert bases in the context of grading.

My argument is roughly as follows. (1) In general, when some property or quality of ours is measured or assessed, where that property or quality is something that makes us deserving of something, the measurement, itself, cannot be deserved on the basis of what is measured. (2) Grades, however, are a measure of student performance, where performance is meant to be the basis on which students deserve their grades. (3) Since they are mere measures of performance, grades are not and could not be deserved on

¹While philosophers theorizing about desert have not explicitly defended this piece of received wisdom in any detail, many in that literature at least mention in passing the idea of students deserving their grades as a paradigm illustration of desert. See, e.g., Feldman & Skow (2020), Feinberg (1970a, 65; 1970b, 259), Arnold (1987, 393), Sher (1989, 53), Pojman (1999, 94), McLeod (1996, 218), Feldman (1995, 65), Scanlon (2013).

the basis of performance, and so, lacking other plausible desert bases, grades are not possible objects of desert.

I emphasize that the argument is a theoretical one, which most directly concerns the place of the concept of desert in education. While I argue that we should rethink the connection between grades and desert, I am not thereby either criticizing or condoning the use of grades in education. Nor does it follow that students lack grounds for complaining if their grades are inaccurate—it simply follows that the complaint, if justified, will not be grounded in facts about the grade they deserve.

The argument has broader theoretical consequences, however. In particular, in making the argument, I defend a novel constraint on the relationship between desert-facts, desert bases, and measurements of desert bases, which I call the "measurement constraint." If the measurement constraint is true, then what goes for grades goes for other measurements or assessments: the results of the measurement or assessment cannot be deserved on the basis of what is measured or assessed. Further, seeing why this constraint holds sheds light on the various evidentiary and explanatory relationships that hold between desert-facts, desert bases, and measurements of desert bases. And insofar as we so naturally slip into thinking that certain results on an assessment or measurement, in certain contexts (credit scores, recidivism-risk scores, driving-test results, e.g.), are deserved, the argument in this paper recommends a substantial revision to our usual application of the concept (or concepts) of desert.²

The structure of the paper is as follows. In section II, I give the conceptual background on grading and desert that is necessary to understand the rest of the argument. In section III, I illustrate the "measurement constraint" on desert objects by considering some examples of measurement and discussing their analogies and disanalogies to grading. In section IV, I give a positive argument in favor of the measurement constraint by considering the evidentiary and explanatory relations between desert bases, measurements, and desert-facts. I also explain why the illusion that grades are deserved is so persistent. Finally, in section V, I argue against the idea that grades are deserved because students, generally, deserve to be measured accurately.

 $^{^{2}}$ Thanks to anonymous reviewers for pressing me to elaborate on some of the broader implications of the paper.

2 Conceptual Background

2.1 Grades

For the purposes of the argument, I follow Feinberg (1970a, 65) in assuming that grades are, essentially, measures: "The point of grading, unlike that of awarding prizes, is not to express any particular attitude toward its object, but simply to make as accurate as possible an appraisal of the degree to which it possesses some skill or quality." For ease of discussion, I will use the term "performance" to refer to what is measured by grades, where performance should be understood quite broadly, so that it can refer to whatever it is that an instructor thinks ought to be measured by a grade. An exam grade, for instance, is most directly a measure of one's performance on that exam. A class grade is, generally speaking, an aggregate measure of a student's performance on various items and dimensions of assessment in a class. In some cases, assessment might be measured purely in terms of performance on exams, in which case class grades simply aggregate examination performances. In other cases, as when class-participation or attendance factor into a class grade, the grade is a slightly broader measure of a student's performance in that class.

Of course, class performance—understood in terms that are typically defined by the instructor's grading rubric—is only what is directly measured by grades. Depending on the nature of the items of assessment, we hope that grades are also indirectly and accurately measuring various cognitive and personal abilities and virtues—competence with class material, reading comprehension, mathematical problem solving, reasoning, diligence, memorization, creativity, and so on.³ Whatever it is that is measured or assessed by a particular instructor, grades are the product of that measurement or assessment, and they signify the degree to which the student possesses whatever it is that the instructor aims to measure.

By saying that grades are, by their essence, measures, is not to deny that they have other properties and functions. For instance, grades might incentivize diligence and responsibility, or they might inhibit student morale, curiosity, and development, or they might simply serve as sorting mechanisms that help to perpetuate an unjust status quo.⁴ To say that they are essentially measures of performance is just to say that they

³There is plenty of room for skepticism about the accuracy of grades as indirect measures, even if one grants (perhaps optimistically) that assessment items aim at indirectly measuring these goods. See Davis (1994) for extensive discussion of the difficulties of accurate assessment.

⁴There is, of course, a rich tradition in the philosophy of education which criticizes educational systems along these (and other) dimensions, which implicate grading as an important feature of those systems. See, e.g., Dewey (1916), Goldman (1972), Freire (1972), Noddings (1984, 2005), hooks (1994),

must measure performance to be grades, and that even if they did not have these other functions or properties, they would still be grades.⁵

2.2 Desert

Next, I want to quickly sketch some features of the nature of desert that are needed for my argument. The most important feature, for my purposes, is that the property of being deserving of something has a certain structure. In particular, it is a relation between a subject and an object, and it is grounded by a desert basis. The subject of desert is just the entity that is deserving of something, the object is what is deserved, and the basis is the grounds, or the explanation of the subject's deserving the object. For instance, if Walter (a cat) deserves a treat for being such a good cat, Walter is the subject, the object is a treat, and the basis of his deserving the treat is his being such a good cat.

Most desert theorists accept additional constraints on what can serve as the bases of desert. For instance, it is typically required that the desert basis, at minimum, be about the subject. In other words, Walter can deserve the treat for being a good cat, but not because Sophie is being a good cat. Somewhat more controversially, it is often assumed that to be deserving of an object, the subject must be responsible for the desert basis (Pojman (1999), Olsaretti (2004), Brouwer & Mulligan (2019)). In that case, Walter can be deserving of a treat for being a good cat, because he is responsible for his behaviors (let's suppose) which make him a good cat. He could not deserve a treat because his fur is black, since he is not responsible for that fact.

My argument is neutral with respect to the aboutness and responsibility constraints. It is also neutral with respect to the question of whether grades are taken to be deserved in the institutional sense of desert, or in a pre-institutional sense. Briefly, whether one is institutionally deserving of something depends on the aims and rules of a particular institution (McLeod (1999), Olsaretti (2004, Ch. 1), Arnold (1987)). A particularly effective mafia member, for instance, might deserve a higher salary, given the rules and aims of the mafia, but it does not follow that they deserve any such good in the pre-institutional sense. Indeed, it is more plausible that they deserve punishment instead.

Amiran (2003), Sandel (2020). I ignore these criticisms for rhetorical purposes, since my argument does not depend on them.

⁵I cannot rule out the possibility that there are cases where an instructor uses grades in such a way that they do not intend to measure student performance, understood one way or another. But given the plausibility of Feinberg's conception of grades, I think that a student would be right to complain that what the instructor calls "grades" are not rightly understood as such. Thanks to an anonymous reviewer for pushing this possibility.

⁶Feldman (1995) and Mulligan (2018), notably, do not endorse the responsibility constraint.

Finally, I make no assumptions here about the connections between desert, justice, and moral obligation.⁷

3 Measurement and Desert: Some Examples

My argument to the effect that grades are not and cannot be deserved relies on the premise that measurements of desert bases are not the sorts of things that are deserved (because of that desert basis):

Measurement constraint: If M is a measurement of a desert basis B, M cannot be deserved on the basis of B.

By "measurement", here, I do not mean the act of being measured, but rather the particular measurement value that is the result of the act of measurement. In other words, someone may deserve (for whatever reason), to have their body temperature measured, but they do not deserve that the thermometer read "98.4", or anything else for that matter.

3.1 Measurement and Effort

It is absurd to think that you deserve that the thermometer read "98.4". The glaring disanalogy between grades and thermometer readings, however, is that in the case of grades, one typically has to exert great effort to receive a good grade, while nothing at all has to be done to get a temperature reading—one has a body temperature no matter what they do. In other words, perhaps the reason we don't think the thermometer reading is deserved is because the desert basis violates the responsibility constraint on desert bases. So perhaps, the objection goes, when what is measured is the result of effort, then the measurement is deserved.

But consider another example. Suppose you are a sprinter competing in a 100-meter dash. You finish in 10.47 seconds and come in second place, for which you are awarded a blue ribbon. Supposing the norm is that the second place finisher gets a blue ribbon, that is the object of desert, the basis of which was your running 100 meters in 10.47 seconds (which was the second fastest time). Once again, it seems like a mistake to think that

⁷See, e.g., Pojman (1999) and Feinberg (1970a) for the idea that desert is relevant to justice, but does not exhaust it. Mulligan's (2018) view is that considerations of desert exhaust considerations of distributive justice (but not moral obligation), while for Rawls (2001, §20), desert is irrelevant to considerations of justice as it pertains to the basic structure of a society, though it may be relevant to moral obligation.

you deserved the clock's showing your time as "10.47"—the clock is simply reflecting how fast you ran. Crucially, it seems just as odd to consider that measurement as something that is deserved, even though running that fast required exerting a tremendous amount of effort, both during the race and during a potentially extensive training period.

3.2 Subjective Measures and Desert

The measurement constraint seems to hold even when what's being measured is the result of someone's efforts. Thus, we don't yet have any reason to reject that constraint. But someone might rightly object that there is another major disanalogy between thermometer readings, timekeeping at races, and grading—namely, that grades involve an element of subjectivity that these other kinds of measurements lack. Perhaps, then, subjective measurements can be objects of desert, and only objective measurements cannot. Since grading involves subjective judgment by the grader, grades can be objects of desert.

This objection gains some support from the fact that desert-claims seem right at home in other contexts involving subjective judgments, as in competitions which involve judges or scorers, like figure skating, boxing, or gymnastics. In these cases, judges have a good deal of discretion in their scorekeeping, and they will often disagree with one another with respect to the particular numerical scores they give. In these contexts, it is commonplace to think that the competitors deserve a certain score (the one that most accurately reflects their performance), and that the judges can fail to give the scores that are deserved. If the commonplace view is correct, then the measurement constraint is false, since it makes no distinction between subjective and objective measures.

I think there are ways to respond to this objection, however. First, grades very often are not particularly subjective. On a typical multiple choice exam, for instance, the grade is an objective measure of the percentage of questions that were answered correctly, where the result is just a measure of performance on the exam. The subjective judgment of the grader does not enter into the determination of the grade in these kinds of cases.

Now, one might argue that grades are always, in some sense, subjective, since the instructor exercises their own discretion in deciding which assessment items to give, and thus how to measure performance and the qualities, skills, or competencies that we ultimately value. This observation is correct, but what it shows is not that grades are inherently subjective, but that there is subjectivity in the interpretation of the qualities that grades are indirectly measuring. In other words, the grade on the multiple choice exam is an objective measure of performance on that exam, but the instructor employs

their subjective judgment in using that objective and direct measure of performance to measure competence in biology, for example.

In many cases, however, grades do involve a considerable subjective component. Grading a research paper, for example, will involve assessing the overall writing quality and clarity, the quality of the arguments, etc. All of these things require considerable subjective judgment on the part of the grader. Sometimes, too, the grader can get things wrong. A grader might, for whatever reason, misjudge the quality of a research paper, assigning it a low grade, when it is actually of high quality. In these kinds of cases, it seems natural to say that a student deserved a better grade than the one they got.

But consider a competitive sprint with a manual timekeeper. The time you get is the result of some subjective judgment on their part, but it does not seem as though you deserve the scorekeeper displaying your actual time. Now, you might fail to get what you deserve if the timekeeper gets your time wrong, and it costs you a position on the podium. Had they measured correctly, you would have gotten the blue ribbon, and so plausibly, you deserve the blue ribbon. But it does not follow that you deserved that the timekeeper display your actual time. More plausibly, you expect the timekeeper to uphold certain professional obligations to keep time accurately (to the extent that they can), and if they do their job poorly or irresponsibly, then they have failed to uphold a professional obligation they have to the sprinters.

4 The Positive Argument In Favor of the Measurement Constraint

The measurement constraint holds up fairly well in these examples, but it would be much better to have an independent argument in favor of the measurement constraint, and to give an explanation of why it is true. I now move to those tasks.

The role of desert bases is explanatory—they are what explain why someone deserves an object. Again, it is the fact that Walter is such a good cat that explains why he is deserving of the treat. In the case of grades, the common thought is that one's class performance explains why they are deserving of the good grade. But this is a confusion. The grade is a measurement of performance, and thus is evidence of a certain quality of performance. Likewise, when the clock shows "10.47" in the sprint, this is a measure of how long the sprinter took to run the race, and thus, is (very good) evidence of the fact that they ran it in 10.47 seconds.

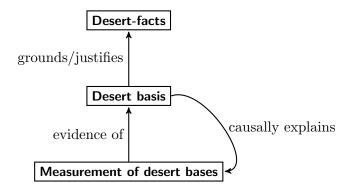
The measurements, in these cases, are simply evidence that a desert base obtains. And while the measurements do not explain why a grade or a time is deserved, they do causally explain why one receives the grade or time. Likewise, the thermometer reads "98.4" because one's body temperature is 98.4. In general, the presence of some property will explain why an accurate measurement detects its presence. It does not follow that the measurements are, therefore, objects of desert.

Consider the corollary epistemic role of desert bases. In general, we appeal to desert bases to give a (grounding) explanation of why someone deserves an object, and thus to justify the idea that they deserve the object. If someone asks why Walter deserves the treat, I reply that it is because he is such a good cat. His being such a good cat both explains and justifies his being deserving of the treat. If someone asks for evidence of his being a good cat, then I point to his various behaviors that constitute his being good.

If grades are deserved, we run into a problem. Suppose we ask why Mary deserves an A. We will say that what explains this fact is her excellent performance in the class—that is the desert basis. But what is the evidence for this latter fact? If the grading in the class is accurate, the best evidence is her grade, which is our best measure of her performance in the class. In that case, our best evidence for why Mary deserves an A would be that she got an A. But this is not very good evidence at all, and certainly does not seem like part of a good explanation for why she deserves the A. Likewise, the fact that the clock shows "10.47"—in conjunction with the fact that it shows longer times for the other runners except for one—is our best evidence that some sprinter ran the race the second fastest, and thus deserves the second-place prize. It is not evidence that the runner deserved that the clock read "10.47".

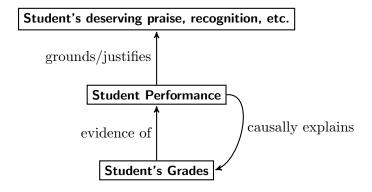
What if the grading in Mary's class is not accurate? Suppose, because of a major grading error, she gets a C instead of the A that she would have gotten had she been graded accurately. In that case, Mary's grade is not the best evidence of her performance, and so when we look for evidence of her deserving an A, we might go back to her exams or papers to try to measure her performance again. What we find is that she would have gotten an A had she been measured accurately. Can we conclude that she deserved to get an A? No. If the fact that she got an A was not good evidence for her deserving an A when the grades were accurate, then the facts that she would have or should have gotten an A, given accurate grading, are not good evidence for her deserving the A either.

But maybe the thought remains that the reason Mary should get an A is because she deserves it, based on her performance. In other words, perhaps during the act of measurement, the grader uses considerations of desert to determine what grade Mary should receive. This is a mistake, however. Rather, the grader simply compares the quality of the assessment item against their explicit or implicit grading rubric. Her evidence that an item of assessment should get a certain grade is exhausted by facts about the item of assessment and the grading rubric. Visually, we could represent the typical evidentiary and explanatory relations between desert bases, desert facts, and measurements of desert bases this way:



When a measurement reveals the presence of a desert basis, it gives us evidence of the desert basis because the result of the measurement is partly causally explained by the presence of the desert basis. The presence of the desert basis, in turn, grounds and gives us evidence of the fact that the subject deserves some object. Crucially, the desert basis does not ground desert of the measurement—this is just to misconceive the role of measurement in the explanation and justification of desert-facts.

The evidentiary and explanatory relations between grades, performance, and whatever students might deserve on the basis of their performance, fit this general schema:



Given this diagnosis, I think we can explain why we mistakenly tend to think of grades as objects of desert. One's performance, and the various qualities and abilities that go into the performance, are things that we usually think make us deserving of things—rewards, wages, recognition, etc. The student who works hard and performs well, in a class, then, reasonably takes themselves to be deserving of some good. Now,

given the importance of grades to a student's academic career, a good grade is highly salient as a potential good to be received. This gives the appearance that a grade is akin to reward for good behavior, and a bad grade a punishment for bad behavior (especially when the grading involves subjective judgment on the part of the grader). Further, one's performance explains why they get their grade, since the grade is just a measure of performance. Thus, the relation between performance and grade mimics the explanatory relation between desert basis and one's deserving an object. Worse, because grades just measure quality of performance, the relation between performance and grade appears to satisfy the "proportionality constraint" on desert bases, which requires that the goodness or badness of a desert object be proportional to the goodness or badness of the desert base.

It is not terribly surprising, then, that grades and results of other kinds of assessments are thought to be objects of desert. But so long as we take class performance to be the grounds on which students are deserving of some good, and grades to be measures of that performance, it is difficult to see why we should continue to use desert-language in the context of grading.

5 Do We Deserve to Be Measured Accurately?

Before I conclude, I want to consider an alternative argument for thinking that students deserve their grades. On the standard proposal, which has been my primary focus throughout, the idea that students deserve a grade just follows from an antecedent view that class performance is a desert basis for receiving a grade. On the alternate proposal, however, a student deserves a grade derivatively, because of their being antecedently deserving of another object—accurate measurement. Supposing that students are deserving of accurate measurement, and supposing facts about the quality of a student's class performance, it follows that the student would deserve whatever grade accurately reflects their performance. Interestingly, then, while the desert basis for the grade is not class performance, facts about a student's performance would still partly explain why they deserve whatever is the accurate grade.

Since this alternative proposal does not involve the idea that class performance is a desert basis for grades, the measurement constraint does not rule it out. The proposal is, therefore, not an objection to the measurement constraint itself, but a separate argument in favor of thinking of grades as deserved which bypasses the measurement constraint.

I think, however, there are good reasons to reject the alternate proposal, because there are good reasons to reject the premise that students (or competitors, etc.) deserve to be measured accurately.

Suppose we do deserve, generally, to be measured accurately in school or in competition. In that case, we have to ask what the desert basis is for one's deserving accurate measurement. And while we might be able to come up with some candidate desert bases here, there is not an obvious, and obviously non-ad hoc answer. Further, if an athlete or a student can deserve to be measured accurately, it's very likely that it should also be possible that they could fail to deserve this. In other words, whatever the desert basis is for deserving accurate measurement, it seems likely that someone could lack that desert basis (especially if we endorse the responsibility constraint on desert bases). But we tend to think that participants in a competition and students in a class should be measured accurately regardless of their characters, their past actions, their supportive or antagonistic attitudes or behaviors towards the institutions they are participating in, or anything else that might serve as a desert basis for deserving accurate measurement.

More likely, then, while people do not generally deserve to be measured accurately, they usually have an institutional entitlement to be measured accurately. It is part of the relevant institution's aims and rules that they be measured accurately, and their mere participation in the institution is sufficient for their having this entitlement, and for the relevant institutional actors to have an obligation to try to ensure accurate measurement. Institutional entitlement, however, does not entail desert—institutional or pre-institutional (Arnold, 1987, pp. 390-391; Scanlon, 2013, p. 102, Feinberg (1970a)). An audience member that pays for a ticket to watch the sprinting competition might be institutionally entitled to a commemorative tote bag (if that is the practice of the competition), but there is no sense in which they deserve that.

In addition, it seems that we can imagine cases where, intuitively, everyone gets what they deserve, despite a lack of accurate measurement. Suppose two runners compete in a secretive competition, with an automatic timer to measure their times. Suppose further that they each record their times on separate days, by themselves, with no one else around. The clock malfunctions for runner A, incorrectly measuring a slower time than runner B. Fortunately, there is a shipping error, and runner A receives the first place trophy, and runner B the second place trophy. Each publicizes their receipt of their trophies and A is rightly praised as the faster runner. In this case, it seems that, despite the inaccurate measurement, there is no failure of desert. There is, perhaps, an institutional failure to ensure that the clock is in good working order, but this failure is rendered unimportant by the happy accident in shipping.

The case is unusual because typically, accurate measurement is partly what ensures that people get what they deserve. But strictly, accurate measurement is not necessary for this, and even if it were, it would not follow that accurate measurement is deserved. This is because, in general, it does not seem that one deserves everything that is necessary for their getting what they deserve. When one deserves a job, for instance, they do not plausibly deserve that everyone else not get the job, or that the job exist in the first place, or that there be an industry which supports the existence of that job, and so on.

I think, then, we have good reason to reject the idea that in competitions or educational contexts, everyone deserves to be measured accurately, and thus we can reject the alternative argument in favor of the idea that grades are deserved, which bypasses the measurement constraint. More likely, we confuse institutional entitlement for desert, especially given that in the usual cases, accurate measurement is crucial to people getting what they deserve. Students are entitled to accurate grades, and perhaps items of assessment which accurately measure the aspects of performance and qualities that we value, and this explains why we think students are wronged (or wrongly benefited) if their grades do not reflect the quality of their performance, or if what is measured is arbitrary. Grades, in the ideal case, then, reflect valuable qualities in a student, and thus are good evidence that the student might be deserving of certain goods—awards, recognition, special opportunities, etc. Despite all appearances, however, grades are not, themselves, deserved.⁸

Bibliography

Amiran, M. (2007). Ethics and the Aims of American Higher Education. In Curren, R., editor, A Companion to the Philosophy of Education, pages 549–560. Blackwell.

Arnold, N. S. (1987). Why Profits Are Deserved. *Ethics*, 97(2):387–402.

Brouwer, H. and Mulligan, T. (2019). Why Not Be a Desertist?: Three Arguments for Desert and Against Luck Egalitarianism. *Philosophical Studies*, 176(9):2271–2288.

Davis, A. (1998). The Limits of Educational Assessment. Blackwell, Oxford.

Dewey, J. (1916). Democracy and Education. Dover Publications.

Feinberg, J. (1970a). Justice and Personal Desert. In *Doing and Deserving*, pages 55–87. Princeton University Press, Princeton, N.J.

⁸Thanks especially to Hanna Gunn, Michael Hughes, Jeff Yoshimi, Bill Lycan, and the UC Merced undergraduates for their feedback on earlier drafts of this paper.

- Feinberg, J. (1970b). The Nature and Value of Rights. *Journal of Value Inquiry*, 4:243–257.
- Feldman, F. (1995). Desert: Reconsideration of Some Received Wisdom. *Mind*, 104(413):63–77.
- Feldman, F. and Skow, B. (2020). Desert. In Zalta, Edward N., editor, *The Stan-ford Encyclopedia of Philosophy*. Winter 2020 edition. Accessed 2/21/2021, https://plato.stanford.edu/archives/win2020/entries/desert/.
- Freire, P. (1972). Pedagogy of the Oppressed. Herder and Herder, New York.
- Goldman, E. (1972). The Social Importance of the Modern School. In Shulman, A., editor, *Red Emma Speaks: An Emma Goldman Reader*, pages 140–149. Schocken, New York.
- hooks, b. (1994). Teaching to Transgress: Education as the Practice of Freedom. Routledge.
- McLeod, O. (1996). Desert and Wages. *Utilitas*, 8(2):205–221.
- McLeod, O. (1999). Desert and Institutions. In Pojman, L. and McLeod, O., editors, What Do We Deserve?: A Reader on Justice and Desert, pages 186–195. Oxford University Press.
- Mulligan, T. (2018). Justice and the Meritocratic State. Routledge, New York.
- Noddings, N. (1984). Caring: A Feminine Approach to Ethics and Moral Education. University of California Press.
- Olsaretti, S. (2004). Liberty, Desert and the Market: A Philosophical Study. Cambridge University Press.
- Pojman, L. (1999). Merit: Why Do We Value It? *Journal of Social Philosophy*, 30(1):83–102.
- Rawls, J. (2001). Justice as Fairness: A Restatement. Harvard University Press.
- Sandel, M. (2020). The Tyranny of Merit: What's Become of the Common Good? Farrar, Straus and Giroux.
- Scanlon, T. M. (2013). Giving Desert Its Due. Philosophical Explorations, 16(2):101–116.
- Sher, G. (1987). Desert. Princeton University Press.